REQUEST FOR APPROVAL

To:	**Howard Levenson** Assistant Director, Materials Management and Local Assistance Program
From:	**Brenda Smyth** Division Chief, Statewide Technical and Analytical Resources Division
Request Date:	**April 20, 2010**
Decision Subject:	**Approval of Scope of Work and California State University Chico Research Foundation as Contractor for the Evaluation of Warm Mix Asphalt Technologies with Asphalt Rubber and Terminal Blends Contract (Tire Recycling Management Fund, FY 2009/10)**
Action By:	**May 30, 2010**

Summary of Request:

Staff requests approval of the Scope of Work (SOW) and California State University, Chico Research Foundation as Contractor for the Evaluation of Warm Mix Asphalt Technologies with Asphalt Rubber and Terminal Blends Contract.

Recommendation:

Staff recommends that CalRecycle enter into the contract with California State University Chico Research Foundation as the contractor, using Fiscal Year (FY) 2009/10 funds allocated to Research on Highway Construction Applications Using Waste Tires in the Research section of the current (5th Edition) Five-Year Tire Plan. This contract will be funded at $440,000 for the tasks outlined in the attached Scope of Work.

Assistant Director Action:

On the basis of the information and analysis in this Request for Approval and the findings set out above, I hereby approve the contract with California State University Chico Research Foundation to Evaluate Warm Mix Asphalt Technologies with Asphalt Rubber and Terminal Blends in an amount not to exceed four hundred forty thousand dollars ($440,000), subject to availability of funds appropriated to this program.

Dated: 5/18/10

Howard Levenson

Howard Levenson
Assistant Director

Background Information, Analysis, and Findings

CalRecycle currently promotes the use of waste tires in various pavement strategies as part of its ongoing efforts to divert waste tires from landfills in California. At present there are many warm mix additive technologies used throughout the United States, including several that are being used in California. However, these additives have only been used minimally with asphalt rubber and terminal blend asphalts. Therefore, in an effort to improve upon these strategies, CalRecycle staff, through this contract, will quantify the potential energy and environmental benefits of using warm mix technologies for asphalt rubber and terminal blend overlays and chip seals. Because these additives allow the mixes to be placed at temperatures up to 100° F below the normal operational temperatures, the potential savings in energy and reduction in emissions could be substantial and could help the paving companies meet potential climate change requirements in the future. For overlays, warm mix technologies can also allow night paving, extend the paving season, and increase haul distances due to the lower allowable working temperature of the blend which translates to more time to haul and/or get the material in place at a lower ambient temperature. In addition, by reducing the temperature of application, fugitive emission control devices presently used for chip seals may not be required. This will potentially increase the usage of asphalt rubber chip seals by making the product more cost effective and expand potential usage areas of the state, especially those with colder climates.